1. An organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer and means for limiting the current flow through any conductive defect in said light-emissive organic layer.

2. An organic light-emitting device according to claim 1 wherein said means are incorporated into at least one of said first and second electrodes.

3. An organic light-emitting device according to claim 2 wherein said at least one of said first and second electrodes comprises a plurality of layers including a first electrode layer adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes and having a resistance selected such that it is not too high to cause a significant increase in the drive voltage of the device, yet high enough to prevent excessive currents at any conductive defect in said light-emissive organic layer.

4. An organic light-emitting device according to claim 3 wherein said first electrode layer comprises a high-resistance material selected from the group consisting of a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material.

5. An organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer, at least one of said first and second electrodes comprising a plurality of layers including a first electrode layer having a high resistance adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes, said first electrode layer comprising a high-resistance material selected from the group consisting of a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material.

6. (amended) An organic light-emitting device according to claim 1 wherein the first electrode layer comprises at least one material having a low work function.

7. (amended) An organic light-emitting device according to claim 1 wherein the semiconductor material is selected from the group consisting of Ge, Si, α-Sn, Se, ZnSe, ZnS, GaAs, GaP, CdS, CdSe, MnS, MnSe, PbS, ZnO, SnO, TiO_2, TiO_2, MnO_2 and SiC, or wherein the insulator material is selected from the group consisting of an oxide, a nitride and a fluoride, preferably from the group consisting Of Al_2O_3, SiO_2, LiO, AlN, SiN, LiF and CsF.

8. (amended) An organic light-emitting device according to claim 1 wherein the conductor material is a ductile metal and preferably is selected from the group consisting of Al and Ag.

9. (amended) An organic light-emitting device according to claim 1 wherein the first electrode layer is comprised of a mixture selected from the group consisting of LiF/Al, Ca/Ge, Li/Si, Ca/ZnO, LiF/ZnSe and CsF/ZnS.

10. An organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer and means for electrically isolating any conducting defect in the organic layer from an associated electrode.

11. An organic light-emitting device according to claim 10 wherein said means are incorporated into at least one of said fast and second electrodes.

12. An organic light-emitting device according to claim 11 wherein said at least one of said first and second electrodes comprises a plurality of layers including a thin first electrode layer adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes, the dimensions and material

properties of said thin first electrode layer being chosen such that, adjacent a conducting defect in said organic layer, said layer will vapourise when subject to an anomalous current resulting from said conducting defect.

13. An organic light-emitting device according to claim 12, at least one of said first and second electrodes being opaque and comprising a plurality of layers including a thin first electrode layer comprising a low work function material adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes, and a second electrode layer adjacent the surface of the first electrode layer remote from the light-emissive organic layer, said second electrode layer comprising a layer of a high-resistance material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material and a conductor material.

14. An organic light-emitting device according to claim 12, comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer, at least one of said first and second electrodes comprising a plurality of layers including a thin first electrode layer comprising a high work function material adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes, and a second electrode layer adjacent the surface of the first electrode layer remote from the organic light-emissive material, said second electrode layer comprising a layer of a high-resistance material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material.

15. An organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer, at least one of said first and second electrodes being

opaque and comprising a plurality of layers including a thin first electrode layer comprising a low work function material adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes, and a second electrode layer adjacent the surface of the first electrode layer remote from the light-emissive organic layer, said second electrode layer comprising a layer of a high-resistance material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material and a conductor material.

16. An organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer, at least one of said first and second electrodes comprising a plurality of layers including a thin first electrode layer comprising a high work function material adjacent the surface of the light-emissive organic layer remote from the other of the first and second electrodes, and a second electrode layer adjacent the surface of the first electrode layer remote from the organic light-emissive material, said second electrode layer comprising a layer of a high-resistance material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material.

17. (amended) An organic light-emitting device according to claim 12 further comprising a third electrode layer on the surface of the second electrode layer remote from the first electrode layer, said third electrode layer comprising a conductor material, preferably a ductile metal.

18. An organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer, at least one of said first and second electrodes comprising a plurality of layers including a first electrode layer having a high resistance, said first

electrode layer having a thickness greater than the light-emissive organic layer, such that any intrinsic defects in the light-emissive organic layer are covered by the first electrode layer.

19. An organic light-emitting device according to claim 18 further comprising a second electrode layer adjacent the surface of the first electrode layer remote from the light-emissive organic layer, said second electrode layer comprising a layer of a conductor material.

20. (amended) An organic light-emitting device according to claim 18 wherein the thickness of the first electrode layer is in the range of 0.5 to 1 micron.

21. An organic light-emitting device according to claim 18 wherein the first electrode layer comprises a material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material and an insulator, a mixture of a semiconductor material and a conductor material and a mixture of an insulator material and a conductor material.

22. A method for improving the uniformity of current density of an organic light-emitting device comprising a light-emissive organic layer interposed between first and second electrodes for injecting charge carriers into the light-emissive organic layer, the method comprising the step of forming one of the first and second electrodes from a plurality of electrode layers including a first electrode layer having a high resistance, said first electrode layer comprising a material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material with an insulator, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material.

23. A light-emissive device comprising a layer of light-emissive material arranged between first and second electrode layers such that charge carriers can move between the first and second electrode layers and the light-emissive material, wherein

at least the first electrode layer comprises a plurality of sub-electrodes, each sub-electrode being connected to each of any sub-electrodes directly surrounding it via a fusible link, each fusible link adapted to break when subject to a current exceeding a specified value to electrically isolate the respective sub-electrode from the other sub-electrodes.

24. A light-emissive device according to claim 11 and wherein said at least one of said first and second electrodes comprises a plurality of sub-electrodes, each sub-electrode being connected to each of any sub-electrodes directly surrounding it via a fusible link, each fusible link adapted to break when subject to a current exceeding a specified value to electrically isolate the respective sub-electrode from the other sub-electrodes.

25. (amended) A light-emissive device according to claim 23 wherein the plurality of sub-electrodes are arranged to create an ordered array of parallel rows and columns, and each of the sub-electrodes is connected via a fusible link to each of any sub-electrodes directly adjacent to it in the same column and row.

26. (amended) A light-emissive device according to claim 23 wherein the size and spacing of the sub-electrodes is selected such that, during operation of the device, the light emitted by the light-emissive device appears to the human eye to be continuous in intensity across the whole area of light emission.

27. An organic light-emissive device comprising a light-emissive organic region interposed between first and second electrodes for injecting charge carriers into the light-emissive organic region, at least one of said first and second electrodes comprising: a high-resistance first electrode layer adjacent the surface of the light-emissive organic region remote from the other of the first and second electrodes, said first electrode layer covering substantially the entire area of the surface of the light-emissive organic region remote from the other of the first and second electrodes and comprising a high-resistance material selected from the group consisting of a mixture of

a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material; and a patterned conductive second electrode layer adjacent the surface of the first electrode layer remote from the light-emissive organic region.

28. An organic light-emissive device according to claim 27 wherein the first electrode layer comprises at least one material containing an element having a low work function.

29. An organic light-emissive device according to claim 28 wherein the element having a low work function is calcium or lithium.

30. (amended) An organic light-emissive device according to claim 27 wherein the semiconductor material is selected from the group consisting of Ge, Si, α-Sn, Se, ZnSe, ZnS, GaAs, GaP, CdS, CdSe, MnS, MnSe, PbS, ZnO, SnO, TiO, TiO_2, MnO_2 and SiC.

31. (amended) An organic light-emissive device according to claim 27 wherein the insulator material is selected from the group consisting of an oxide, a nitride and a fluoride.

32. (amended) An organic light-emissive device according to claim 31 wherein the insulator material is selected from the group consisting of Al_2O_3, SiO_2, LiO, AlN, SiN, LiF and CsF.

33. (amended) An organic light-emissive device according to claim 27 wherein the conductor material is a metal.

34. An organic light-emissive device according to claim 33 wherein the conductor material is selected from the group consisting of Al and Ag.

35. (amended) An organic light-emissive device according to claim 27 wherein the first electrode layer is comprised of a mixture selected from the group consisting of LiF/Al, Ca/Ge, Li/Si, Ca/ZnO, LiF/ZnSe and CsF/ZnS.

36. (amended) An organic light-emissive device according to claim 27 wherein the thickness of the first electrode layer is in the range of 0.5 to 1.0 microns.

37. An organic light-emissive device according to claim 27 wherein the first electrode layer comprises at least one element having a work function greater than 4.5eV.

38. An organic light-emissive device according to claim 37 wherein the first electrode layer comprises at least one material selected from the group consisting of Au, Pd, Pt and ITO.

39. An organic light-emissive device comprising a light-emissive organic region interposed between first and second electrodes for injecting charge carriers into the light-emissive organic region, at least one of said first and second electrodes comprising: a high-resistance first electrode layer adjacent the surface of the light-emissive organic region remote from the other of the first and second electrodes, said first electrode layer formed over substantially the entire area of the surface of the light-emissive organic region remote from the other of the first and second electrodes, and having a thickness greater than the light-emissive organic region whereby adverse effects of any defects in the light-emissive organic region are compensated for by the first electrode layer; and a patterned conductive second electrode layer adjacent the surface of the first electrode layer remote from the light-emissive organic region.

40. An organic light-emissive device according to claim 39 wherein the thickness of the first electrode layer is in the range of 0.5 to 1 micron.

41. (amended) An organic light-emissive device according to claim 39 wherein the first electrode layer comprises a material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material and an insulator, a mixture of a semiconductor material and a conductor material and a mixture of an insulator material and a conductor material.

42. A method of forming an electrode of an organic light-emissive device comprising a light-emissive organic region interposed between first and second electrodes for injecting charge carriers into the light-emissive organic region, the method comprising forming one of the first and second electrodes by the steps of: first forming a high-resistance first electrode layer over substantially the entire area of the surface of the light-emissive organic region remote from the other of the first and second electrodes, said first electrode layer comprising a material selected from the group consisting of a semiconductor material, a mixture of a semiconductor material with an insulator, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material; and then forming a patterned conductive second electrode layer over the surface of said first electrode layer remote from the light-emissive organic region.

43. An organic light-emissive device comprising a light-emissive organic region interposed between first and second electrodes for injecting charge carriers into the light-emissive organic region, at least one of said first and second electrodes comprising: a first electrode layer comprising an insulator material adjacent the surface of the light-emissive organic region remote from the other of the first and second electrodes; a high-resistance second electrode layer adjacent the surface of the first electrode layer remote from the light-emissive organic region; and a patterned conductive third electrode layer adjacent the surface of said second electrode layer remote from the first electrode layer, wherein said first and second electrode layers cover substantially the entire area of the surface of the light-emissive organic region remote from the other of the first and second electrodes; and said second electrode layer comprises a high-resistance material selected from the group consisting of a

semiconductor material, a mixture of a semiconductor material with an insulator material, a mixture of a semiconductor material with a conductor material and a mixture of an insulator material with a conductor material.

44. An organic light-emissive device according to claim 43 wherein the first electrode layer comprises a layer of a dielectric material.

45. (amended) An organic light-emissive device according to claim 43 wherein the first electrode layer comprises a dielectric material containing a low work function element.

46. An organic light-emissive device according to claim 45 wherein the first electrode layer comprises a layer of at least one dielectric material selected from the group consisting of LiO, CsF and LiF.

47. (amended) An organic light-emissive device according to claim 43 wherein the semiconductor material is selected from the group consisting of Ge, Si, α-Sn, Se, ZnSe, ZnS, GaAs, GaP, CdS, CdSe, MnS, MnSe, PbS, ZnO, SnO, TiO, TiO_2, MnO_2 and SiC.

48. (amended) An organic light-emissive device according to claim 43 wherein the insulator material of the second electrode layer is selected from the group consisting of an oxide, a nitride and a fluoride.

49. An organic light-emissive device according to claim 48 wherein the insulator material of the second electrode layer is selected from the group consisting of Al_2O_3, SiO_2, LiO, AlN, SiN, LiF and CsF.

50. (amended) An organic light-emissive device according to claim 43 wherein the conductor material is a metal.

51. An organic light-emissive device according to claim 50 wherein the conductor material is selected from the group consisting of Al and Ag.

52. (amended) An organic light-emissive device according to claim 43 wherein the thickness of the second electrode layer is in the range of 0.5 to 1.0 microns.

53. (amended) An organic light-emissive device according to claim 43 wherein the thickness of the first electrode layer is less than 10nm.

54. An organic light-emissive device according to claim 53 wherein the thickness of the first electrode layer is less than 5nm.

55. An organic light-emitting device according to claim 1 wherein the thickness of the first electrode layer is in the range of 0.5 to 1.0 microns.

56. (amended) An organic light-emitting device according to claim 13 wherein the first electrode layer is comprised of a layer of a material selected from the group consisting of Ca, Li, Yb, LiF, CsF and LiO,

57. (amended) An organic light-emitting device according to claim 13 wherein the thickness of the first electrode layer is in the range of 0.5nm to 10nm, preferably less than 5nm.

58. (amended) An organic light-emitting device according to claim 1 wherein the organic light-emitting device further comprises a second electrode layer on the first electrode layer, said second electrode layer comprising a layer of a conductor material, preferably a layer of a ductile metal.

Respectfully Submitted,

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